

**ESTABLISHING A FRAMEWORK FOR
MUNICIPAL TECHNICAL ASSISTANCE
IN INFRASTRUCTURE FINANCE**

by

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ABSTRACT

The decentralization underway in Hungary over the last few years has resulted in rapidly increasing responsibilities for local governments. Large among these is the development and operation of much of the country's infrastructure, which — as in other Eastern European countries — is not currently in adequate condition. The local governments are facing this new task in a fluctuating environment, with both their financial and institutional structures undergoing rapid change. While local governments have been given greater decision-making power, central subsidies for infrastructure development have declined. At the same time operating charges for public utilities which were heavily subsidized by the central governments are now being liberalized, so that users are having to devote much larger shares of their income to heat, water, and power. This report describes the challenges facing local governments in financing infrastructure development and identifies areas in which technical assistance would be most beneficial.

EXECUTIVE SUMMARY

The decentralization underway in Hungary over the last few years has resulted in rapidly increasing responsibilities for local governments, including the development and operation of much of the country's infrastructure. The local governments are facing this new task in a fluctuating environment, with both their financial and institutional structures undergoing rapid change. While local governments have been given greater decision-making power, central subsidies for infrastructure development have declined. At the same time operating charges for public utilities which were heavily subsidized by the central governments are now being liberalized, so that users are having to devote much larger shares of their income to heat, water, and power.

The upgrading, extension, and operation of infrastructure are clearly within the domain of the local governments at this time. They are currently obliged to provide extensive operating subsidies as well as development costs. They face these acute pressures within a new institutional structure and with declining central subsidies; for example, last year applications by local governments for targeted subsidies exceeded available resources by HUF 11 billion. Faced with this financial crunch, management in some cities perceives the need to start thinking more broadly, but most cities are responding to crisis after crisis and are not looking at the infrastructure problem strategically, or linking it with an economic development plan.

The institutional framework for utilities in Hungary is in a period of rapid change. Until recently, most of the infrastructure entities were under direct state control and received funding from central government. These entities faced "soft budget constraints" and had little incentive to operate efficiently. Ownership of these enterprises was transferred in 1990 under the Act on Local Government. The Act on the Transfer of Property formalized local ownership of public utilities, including water and sewage works, gas and district heating. Many important aspects of ownership, regulation, finance, and operation have not yet been worked out, however. For example, the ownership forms of the new local companies are still being designed, regulation of utilities is undefined, and the right to set utility prices — intended to be a local power — has not yet been fully transferred. The existing legal framework, which has been changing quickly, is still full of contradictions and gaps.

Municipal finances remain heavily dependent on central transfers which have not kept pace with increasing local responsibilities, and whose magnitude is uncertain, as it is determined at the beginning of each year in the central Budget Act. Almost 45 percent of local government revenues are from state normative grants and subsidies, allocated to local governments according to certain demographic criteria. Addressed (earmarked) and targeted subsidies, and centrally managed funds are the most specific central government sources for infrastructure investment. Local taxes represent quite a small part of the local budget partly because the new local governments are wary of overburdening the population, and partly due to the constraint of central regulations. OTP currently is by far the major lender to municipal governments. Loans are usually for three to five years, with a variable interest rate, currently at 25 percent and are secured primarily by the city budget. Loans are gaining in popularity but remain on average only about 5 percent of local budgets.

The budgeting process and management of the local public economy is one of the weakest areas for local governments. The budgeting process lacks any overall consideration of the city

economy. Most cities have not systematically attempted to put together an economic development strategy or to develop any broader context for their investment decisions; in general planning only extends as far as the current year. One problem is the unpredictability of resources. Another problem is institutional; the municipal budget department has traditionally been far from the political arena or the decision-making process, so that when planning is underway, it does not integrate budgetary considerations. Overall planning — including capital budgeting — must increase, and has to consider revenue raising rather than just automatically spending by categories as before. Future tax base estimation is rarely undertaken, and OTP loans are the only source for debt financing that is considered. The resistance to cost recovery which nominally based on the hardships of the populace also has roots in municipal inexperience.

Given the range of infrastructure problems and institutional environments, the report proposes two alternative forms of technical assistance: one highly focused, addressing a specific infrastructure component; and the other more general, focusing on how to improve the overall performance of the sector and to strategically use infrastructure investments to promote economic development. While the centerpiece of assistance will be infrastructure projects, skill-building will be broad — capital budgeting, project preparation, cost recovery, developing strategic capabilities, local tax base estimation, and linking investments to economic development strategies. Simultaneously, technical assistance related to the changing institutional structures will be provided, including streamlining the organizational structure, collections and delinquency management, the regulation of utilities, and efficient property management. Moreover, the municipal work will be complemented by background work at the national level on new financing mechanisms, looking at matching grants, off-budget funds (revolving funds, subsidized credit), and decentralization of price setting. Suggested local governments for assistance include District XVII and XVIII, Szolnok, and Szeged.

ESTABLISHING A FRAMEWORK FOR MUNICIPAL TECHNICAL ASSISTANCE IN INFRASTRUCTURE FINANCE

URBAN INFRASTRUCTURE IN HUNGARY

The decentralization underway in Hungary over the last few years has resulted in rapidly increasing responsibilities for local governments. Large among these is the development and operation of much of the country's infrastructure, which as in other Eastern European countries, is not currently in adequate condition. The local governments are facing this new task in a fluctuating environment, with both their financial and institutional structures undergoing rapid change. While local governments have been given greater decision-making power, central subsidies for infrastructure development have declined. At the same time operating charges for public utilities which were heavily subsidized by the central governments are now being liberalized, so that users are having to devote much larger shares of their income to heat, water, and power.

This report describes the challenges facing local governments in financing infrastructure development¹ and attempts to identify the areas in which technical assistance would be most beneficial. The focus will be on public utilities — water, sewage, gas, and district heating — which are mandated local responsibilities along with other communal services such as the collection and disposal of solid waste, but the report will also address other infrastructure development that concerns local governments, such as the road network. Electricity and telecommunications do not fall within the authority of local governments, and so are not explicitly addressed in this report or in the proposed technical assistance program.

Level of Urban Infrastructure

In Hungary, as in other East European economies, infrastructure development lagged behind general economic development and to the needs of the economy, as replacement and modernization of infrastructure were neglected. In the centrally planned economy infrastructure was considered in many ways as consumption, which drained the investment resources from the productive sector. A shift in favor of infrastructure investment took place starting in the mid-1970s as development in both water and gas networks has increased (see Table 1), but the basic backwardness of the infrastructural sector continued until the time of political transition of 1989-90.

The term infrastructure is used in Hungary in a broad sense comprising transportation, communications, health service, education, public utilities, and housing among other services. In this report we are using the narrower concept of "technical" infrastructure connected with the urban/housing sector.

Table 1. The share of the water management, telecommunications, and roads in total investments in Hungary (as percent of total investment in that year at current prices)

	1950	1960	1970	1980	1990
Telecommunication Post	1.9	0.7	1.3	1.9	4.6
Water management	0.8	1.6	4.0	5.5	5.7
Transportation (including roads)	14.1	13.1	11.2	10.8	7.0

Source: Central Statistical Office, 1992.

Estimates of the value of deferred infrastructural investment vary between 1,600 and 900 billion HUF. The new government has had to face an economic recession while undertaking the enormous problems of the transition. During the years since 1989 infrastructure has received increasing attention, but development continues to be plagued by the shrinking in real terms of government budgets and household incomes combined with the fragmentation and complexity created by the process of decentralization.

Recognizing the need for prioritization, a recent government report identifies five areas to be given special access to central government targeted subsidies. Sewage and water head the list, followed by major highways (routes M3 and M5), railroad modernization, buses, and telecommunication and post.

The consensus in most municipalities as well as at the national level is that sewage is the most urgent infrastructural problem. There is a large gap between water supply and sewage service: 80 percent of settlements have water connections and 17.1 percent have a sewerage system; for households the respective figures are 85 and 42 percent. Water supply is plentiful, with 911.1 million m³ water produced in 1990, 95 percent of which was drinking water; 579 million m³ were used by households. Sewage treatment plants serve only 45 percent of the sewage discharged by existing systems, but it is estimated that of the 4859 million m³ of sewage handled in 1990, only 20 percent of that amount was treated, 70 percent was not adequately treated, while 10 percent received no treatment at all. In addition to insufficient treatment, the gap in sewage infrastructure leads to a serious environmental problem because more than 89 percent of the drinking water supply of the country is connected to sub-surface water resources which are endangered by septic tanks, among other pollutants. There are, for example, an estimated 750 Hungarian villages which do not have clean drinking water—contaminated by nitrates from fertilizer and waste—so that water has to be trucked in.

The road system is quite underdeveloped with respect to percent paved per area compared to western countries. Although the telephone system is notoriously

incomplete (with an estimated 12 lines per 100 Hungarians) and lines are of poor quality, in the last year significant improvements have been made through increased user charges, foreign investment, and the use of telephone bonds. The telecommunications law, scheduled to take effect in June, will establish a legal structure for privatization.

A government "Blue Paper" issued in January of 1993 estimates that required energy reconstruction—restructuring and modernization necessary to meet adequate safety and environmental standards and developing networks to access western sources—alone will require an investment of 65-76 billion HUF, of which one third is to be covered by the central budget.

Gas development grew quickly after the 1960s, and the length of the gas network now reaches 22 thousand km, with 30 percent of the production used by the households. About 42 percent of households have a gas connection; another 46 percent use canned gas. In the last few years efforts have been stepped up to increase gas connections through a special program in which neighborhood associations are formed and users and the local and national government share costs. (Similar associations are used for other utilities as described below.)

District heating has been until recently heavily subsidized (city subsidies were 3.3 billion in Budapest in 1990; 30 million in Debrecen and 5.4 million in Szolnok last year) and is viewed as a grossly inefficient heating source. It is the most expensive way to heat a flat, especially as it cannot be regulated, and the long pipelines result in much heat loss; where it is associated with large panel housing estates, it is aggravated by the inadequately insulated design of many of those buildings. This sector is generally characterized by high arrears²—because of the high cost, and because district heat is generally not individually metered, nor can one delinquent user in a building be cut off.

Nationwide, over 450,000 units have been built with district heating since 1971, the declining incidence reflecting awareness of high energy costs (see Table 2). The current total number of units nationwide using district heating is not known with precision, but the figure was 30.5 percent (236,838 units) in Budapest in 1990, and at present 41 percent (33,000 units) in Debrecen and over 10 percent in Nyiregyháza (15,000 units).

Figures at present are HUF 100 million in Debrecen and 5 million in Szolnok; in Budapest, arrears reached almost 300 million.

Table 2. The share of new units with district heating

Years	Number of New Units	Number of Units with District Heating	Percentage of Units with District Heating
1971-1975	438,138	113,310	25.86%
1976-1980	452,715	171,608	37.91%
1981-1985	369,689	126,591	34.24%
1986-1990	272,452	53,270	19.55%
1991	33,164	2,541	7.66%

Of inhabited houses, 99 percent have electrical connections. In 1990 domestic electric energy production was 28.4 billion kilowatts, supplemented by 13 million imported kilowatts. Industry consumed 45 percent of the total, with households making up another 28 percent.

In 1990 166 cities had regular solid waste collection, with 65 percent of the households connected to organized solid waste collection. Of those, 85 percent have daily service, while the others have weekly service. There are about 2600 waste dumps of which only 100 comply with environmental regulations and 900 are completely unsupervised. About 65 percent of the waste generated in cities is treated, while none is treated in rural areas. In Budapest, non-industrial waste incinerators have a capacity of 1200 tons per day and can handle 30 to 35 percent of the city's waste.

INFRASTRUCTURE DEVELOPMENT: A SYSTEM IN TRANSITION

Within the economic restructuring now underway in Hungary, the relative importance of infrastructure within public policy will increase. In the long run the government will privatize its productive enterprises, which have until now been the focus of government policy, while public utilities will remain within the public sector. Utilities will be primarily a local government responsibility: current central policy seems to have the aim of eliminating central subsidies and— in many cases — central regulation.

The upgrading, extension, and operation of infrastructure are clearly within the domain of the local governments at this time: responsibility of provision of most public utilities, and ownership of the related assets have been given to local authorities. They now have financial responsibility for both operation and development— i.e., are currently obliged to provide extensive operating subsidies as well as development costs. They face these acute pressures within a new

institutional structure and with declining central subsidies; for example, last year applications by local governments for targeted subsidies exceeded available resources by HUF 11 billion. Requests from local governments consistently exceed approved grants. In 1991 requests for targeted grants came to 15.8 billion HUF compared to 8.5 billion HUF approved. In 1992 targeted and addressed grants combined came to 26.5 billion HUF, although requests totalled 42.6 billion. Estimates indicate these trends are continuing 1993 and 1994. Faced with this financial crunch, management in some cities perceives the need to start thinking more broadly, but most cities are responding to crisis after crisis and are not looking at the infrastructure problem strategically, or linking it with an economic development plan.

This part of the report starts by examining current institutional and legal changes, especially the redistribution of responsibilities between central and local governments, and the new structure and management of public works companies. Next, the report describes current intergovernmental financial relations, focusing on those elements that affect the finance of infrastructure development, especially central subsidies and grants and user charges. The final section will provide an overview of local options for managing the development of public infrastructure, looking at both current practice and specific problems as well as some examples of successful investments. Local governments must mix subsidies, user fees, revenue from asset sales, taxes, and debt in new ways in order to meet their new responsibilities.

The aim of this description is to outline the challenges facing local governments and to identify possible tools which may be of use to them. The final part of the report will outline a proposed technical assistance program which will help cities develop cost-effective capital investment strategies, through improved project preparation and capital budgeting.

The Institutional and Legal Environment: The Changing Structure and Organization of Infrastructure Provision

The institutional framework for utilities in Hungary is in a period of rapid change. Until recently, most of the infrastructure entities were under direct state control and received funding from central government. These entities faced "soft budget constraints" and had little incentive to operate efficiently. Ownership of these enterprises was transferred in 1990.

The principle of redistribution (defined in a series of old and new laws) is that elements of the infrastructure with national importance are in the hand of the central government and the state companies, especially providing and controlling the national resources (basic water, energy, and gas production for example) while the distributional network is allocated to state companies (intended to be privatized

eventually) and local government companies. However, the actual legal distribution has not yet been finalized in each area, and in most cases the transfer is not straightforward.

The Act on Local Government, passed in 1990, transferred to local governments a number of assets and new powers and responsibilities, among them the provision of healthy drinking water, public lighting, maintenance of local public roads and housing. The Act on the Transfer of Property formalized local ownership of public utilities, including water and sewage works, gas and district heating. Many important aspects of ownership, regulation, finance, and operation have not yet been worked out, however. For example, the ownership forms of the new local companies are still being designed, regulation of utilities is undefined, and the right to set utility prices—intended to be a local power—has not yet been fully transferred. The existing legal framework, which has been changing quickly, is still full of contradictions and gaps.

Local Government Supervision

According to the Act on the Transfer of Property, public utilities and parts of public utilities which supply only one given settlement were transferred into the ownership of the local government, while public utilities supplying more than one settlements were transferred to the ownership of the county local government, or into the joint ownership of the relevant local governments, based on the relevant decision of the Asset Transfer Committee.

Taking the water and sewerage sector as an example, last year's 33 water and sewerage utilities have multiplied into 45 now, and the number is expected to increase to about 100 by the end of the year. Some of these companies are regional systems which are considered indivisible and are still owned by the state; the other companies are owned by local governments. Local assets can be divided into two parts, called "operating assets" (those companies referred to above which serve more than one local settlement) and "utility assets." Operating assets are owned jointly by several local governments because it is considered counterproductive to divide them further; utility assets are assets—for example, networks of pipes—that are clearly specific to one locality. The new "operating asset" companies have the implicit authority granted by their several local owners to operate water and sewerage systems. This authority is supposed to become more explicit—through contracts or concessions, for example—in the near future. In many cases it is expected that local authorities will be eager to subdivide further, especially where they believe (rightly or wrongly) that such a subdivision will result in lower operating costs for them, i.e., where they believe their locality is currently subsidizing others.

The relationship between local authorities and the companies they now own in one form or another is often not clear. The restructuring process is taking place in an environment in which the control of natural monopolies has not yet been developed, causing many political and technical problems. There is little monitoring of the companies by the municipalities— partly because municipal staff doesn't have the technical skills, partly because monitoring systems are not yet established.³ Oversight of the company is usually through a committee of the municipal assembly, which occasionally reviews what the company is doing. The advance yearly budget of the company and proposals for new tariffs are subject to approval by the local authority's general assembly.

Earlier, supervision of public works was exercised at the county level, and in Budapest by the municipality. After the change of regime in 1989, almost all county level responsibilities were dissolved and transferred to the relevant local assemblies, while in the capital the municipal staff's level of authority was greatly reduced and transferred to the Assembly. The public works departments in Budapest and other cities were given only authority to describe and advise on decisions to be undertaken, but no budget and no decision-making power. Consequently, technical professionals often left municipal offices because of reduced powers and responsibilities, although their skills are still needed. The usual process for decision-making is that a company submits an issue to the Public Works Department, which prepares a memorandum for submission to the relevant committee of the city assembly, which reviews it and reports upon it to the general assembly. Far too many detailed decisions require assembly review and approval.

Local government oversight of public companies is currently inadequate. City administration, the elected committees and the mayor's office are competing over the control of the companies. Legally they have only the right to appoint the manager of the company, but they have no say in the internal business management, and their involvement with daily operations will be further curtailed once the companies are reorganized. However, local governments could require much more than they actually do— e.g., impose financial reporting or monitor the carrying out of planned budgets— but mostly do not because of their staff's inexperience in these areas.

According to the law the public companies should by the end of 1996 be reorganized into joint stock company form (although ownership need not have actually changed). It is likely that profitable public utility companies will be

It should be mentioned that while there is a lack of technical supervision from the local government, the Ministry of Transportation, Communication and Water Management has placed heavy emphasis on standardizing a high level of professional competence within the local water companies themselves.

privatized, but that those which are not profitable will remain joint stock companies owned by all the local governments being served. Various experiments in form are taking place as local authorities consider the options of privatization, joint ventures, concessions or continued municipal ownership. The possibilities for concessions have recently been expanded— until now basically only the road system concession existed. A concession law was passed in 1991 (Act XVI) to create an appropriate legal framework for granting concessions for operation of a number of public services including highways, railways, telecommunication, electricity, pipeline transport, and postal services. Further regulations will be forthcoming in each of the sectors.

As a holdover from the past regime when there was a shortage of construction capacity, most of the public companies still have their own construction subsidiaries. In fact, most public firms undertook a variety of different functions, sometimes to offset a shortage of goods, especially imports (e.g., pipeline production in a water company, repair garage in most utility companies) and to compensate for capital expenditure becoming impossible as a result of a shortage of resources (construction capabilities). The companies are often reluctant to split off the non-utility functions, because of cross-subsidization and economies of scale as in some instances when special equipment can be used in both areas. However, in order to privatize, many companies are undergoing "profile cleaning", in which departments unrelated to the primary activity are being dissolved. It is also true that competition has become strongest in the areas of these subsidiary activities, so that many of them— for example pipe production— became loss makers in the early 1990s.

Very few of the companies are truly profitable at present, as they are dependent upon subsidies at least for development, and usually for operations and maintenance as well. In Budapest only the gasworks is profitable. There is a suggestion therefore to regroup some of the companies, such as creating a holding company incorporating "water companies"— Water Works, Sewage Works and the loss-making Bath Directorate.

Operation and Maintenance

Public works companies run their operations fairly autonomously under their own budgets, covering expenses from revenues and explicit subsidies they receive from the central budget or the local municipality. Development costs are charged to the municipality. In the case of Budapest, costs associated with more than one district (e.g., mains, treatment plants) are the responsibility of the City while districts own the network and other truly local assets.

Local governments are still relied upon to provide extensive operating subsidies, although subsidies varied among utilities, and in the last few years their

magnitude has changed considerably as well. District heating was heavily subsidized by the central government: in 1990 Budapest's district heating company received the largest central subsidy— 3.3 billion HUF, or nearly 40 percent of the revenue for heating. Its subsequent subsidies are in the form of normative grants. In 1991 and 1992 the company went into the red. On the other hand, the Gas Works received no subsidy at all and was the second most profitable company in 1990 (after the District Heating Works, which produced 61 percent of total profit). Debrecen in 1992 had to provide subsidies of 30-40 million for water, 100 million for transportation, 30 million for district heating, and 100 million for housing.

Where revenues do not suffice, there have been declines in the level of maintenance. For example, in the Budapest water and sewage network, only 8 to 10 kilometers were upgraded last year instead of the necessary 40 to 50 kilometers. The increase in charges for 1993 will make it possible to undertake the necessary maintenance work.

Examples of Current Institutional Structure

Brief descriptions of the city and district utility responsibilities in Budapest, of the water and sewage arrangements in Nyiregyháza, and the transportation companies in Debrecen will illustrate some of the complexities of the changing institutional structure within the local government on the one hand and the management of public utility operations on the other.

Responsibility for Utilities in Budapest. Institutional arrangements in Budapest are particularly problematic because of the complex division of authority between the municipality and the twenty-two districts. According to the recent laws (Act on Local Government, Capital Law and the Law on the Transfer of Property) the supply of public works is the responsibility of the municipality—with the exception of telecommunication and electricity (national responsibilities) and public lighting⁴ and three-fourths of Budapest parks, which are the districts' responsibility. On the other hand, certain scopes of price setting are retained at the central level by relevant ministries, while other rights including building permits and some urban planning powers are within the domain of the districts.

Within the sphere of authority of the municipality, there is a further division between the city and the city-owned companies. The municipality decides about capital investment, while the operation and maintenance of the works is the

Ironically, while public lighting is the only task entirely within the scope of authority of the districts, owing to technical reasons and the company structure this can only be performed on a city-wide basis. Accordingly districts transfer the central subsidy they receive to the City which then pays for the operation of lighting.

responsibility of the companies under their own budget and the ill-defined supervision of the city. Some responsibility for development is further subdivided between the municipality and the districts, as in the case of the sewage network in which mains related to more than one district and water treatment plants are the responsibility of the City, while local networks belong to the districts. Further, where the City is responsible for development there is a potential for conflict with district governments which have control of permits for building and for establishing enterprises. This gives powerful expression to the "Not-In-My-Backyard" (NIMBY) syndrome, in which districts can refuse establishment of wastewater treatment plants, incinerators, or other unwanted developments. In some cases negotiations result in a *quid pro quo*, with the district granting permission to build in return for funds.

Despite this official allocation of responsibilities, there are times that districts participate in financing something that should be the responsibility of the city, because they believe it is in their interest to move more quickly than city resources or decision-making processes might allow. One example is the current situation in Districts XVII and XVIII where the sewage network is heavily overloaded so that the districts feel that they urgently need a new sewage treatment plant, and may take steps in that direction although normally this would be the financial responsibility of the city.

The Nyiregyháza Water Company. The Nyiregyháza water company was split into several companies as of January 1, 1993—on the one hand a company formed of the "operating assets", responsible for water supply for 26 local governments including Nyiregyháza and owned by all of them (Nyiregyháza owns a 60 percent share), and on the other the utility assets which became the property of each of the 26 governments. The operating company was formed in January 1993 and is in the last phase of becoming independent.

The Regional Water Authorities bring additional complications. The water company in Nyiregyháza buys 60,000 cubic meters of water per day (out of a total 65,000) from the state-owned Tisza Regional Water Authority (headquartered in Szolnok). The price they pay is cheaper than the cost of producing their own water because of the economies of scale, but even so the Nyiregyháza company feels the price would be considerably lower if the consumer didn't have to pay two overheads. With respect to operating costs—not development—the company is now breaking even, but would be reluctant to give up the construction function it currently has, which brings in HUF 100 million of its HUF 740 million total revenues.

The Debrecen Transportation Companies. In Debrecen two transportation companies provide mass transport. While this competition may increase efficiency, the transportation sector requires cooperation, for example with respect to setting

tariffs and fairly distributing routes. Moreover the central subsidy is allocated to the two companies according to usage, and most passengers use a pass valid for both companies, making it hard to determine volume for the respective systems. Further, one company is owned by the central state (the Ministry of Transportation) and the other by the local government; a modification of this arrangement will clearly be a political question.

The Evolution of Sources for Infrastructure Finance

Before 1986 there existed an expenditure controlled system for infrastructure investment. A local government would develop its investment plan, and the central government would finance those investments that it approved. In this environment little if any attention was given to cost recovery from users and direct beneficiaries. After 1986 it began to move towards a revenue-controlled system, giving local governments more autonomy in decision-making, but less completed funding for investment projects. "Addressed" and "targeted" subsidies — which are central grants intended to be added to local funds for investment projects — date from this period.

The economic transition has changed the financial structure of infrastructure. There are two separate questions: financing operations and financing capital investments. Operating costs for the public works that are local responsibilities are currently supposed to be almost entirely financed from user charges, but in many situations local governments are still obliged to provide hefty operating subsidies to the utilities companies, as described above.

Capital cost financing in the areas where the central budget or the state companies are responsible for the services— for example basic energy supply, or main transportation— is the responsibility of the state. Where services belong to the local government, capital costs are provided from shared resources: the central budget and central government-controlled funds (described below), and the local budget.

Intergovernmental Financial Relations

While municipal finances are relatively stable compared to other sectors of the Hungarian economy (state-owned enterprises, for example), they remain heavily dependent on central transfers which have not kept pace with increasing local responsibilities, and whose magnitude is uncertain, as it is determined at the beginning of each year in the central Budget Act. In 1987 local governments were also given the right to levy local taxes (the conditions of which, however, were centrally determined) and became entitled to share personal income tax (PIT) revenue generated on their territory, but the percentage they received was cut from 100 to 50 and then to 30 percent since then, always lagged by two years. In September 1991 the ownership of the majority of public property, including notably public utility companies and the public rental housing stock, was transferred from the central state to the local level.

One result of recent changes in intergovernmental finance has been a slight favoring of smaller towns over larger ones, so that larger cities are receiving less money than before. Szolnok, for example, reported a decrease of HUF 150 million in central transfers due to the decrease in PIT revenue not sufficiently counterbalanced by the increase in normative grants. Furthermore, county seat towns were this year excluded from receiving addressed subsidies.

Local governments' financial sources are comprised of central budget transfers (normative grants, shared taxes, and special funds or subsidies), local revenues (taxes, user fees, and income from property), and increasingly, loans from the financial sector. The share of each of these in local authority budgets can be seen below in Table 3; a brief review of each of these follows.

Table 3. Revenues by source in planned 1993 local budgets for Nyiregyháza, Debrecen, Szolnok and Budapest, and all local governments (percent)

	Nyiregyháza	Debrecen	Szolnok	Budapest	National average*
Local revenues	25.1	28.9	20.2	26.9	18.0
of which: local taxes	4.4	4.5	3.1	5.2	3.0
Normative grants**	55.9	69.7	70.3	49.0	44.5
of which: shared taxes (including PIT)	10.5	13.4	16.3	14.7	13.0
Special funds, addressed and targeted subsidies	6.5	1.4	4.2	0	10.0
Loans	4.5	–	3.3	8.2	n/a
Other	8.0	–	2.2	1.2	n/a
Total	100.0	100.0	100.0	100.0	100.0
Total (in billion HUF)	5.6	8.8	3.6	63.7	–
Population	116,000	200,000	80,000	2 million	10 million

Source: City Budgets, and Ministry of Interior, Local Government Finance Office

* National average normative grant figures include targeted and addressed subsidies, but do not include shared taxes. Local revenue includes 4 billion from local assets.

** Includes social security transfers to fund health care.

Almost 45 percent of local government revenues are from state normative grants and subsidies. Normative grants are allocated to local governments according to certain demographic criteria (e.g., active/inactive population or number of school children) for a number of intended purposes but can be spent quite freely; grants in 1992 contained an element for supporting public works of 3000 HUF per inhabitant.

Addressed (earmarked) and targeted subsidies, and centrally managed funds are the most specific central government sources for infrastructure investment. The central funds can be applied for by local governments for specific purposes, such as encouraging agriculture or the development of animal husbandry or protecting forests. The funds relevant to infrastructure finance include the water fund (allocated HUF 3 billion in 1993), road development (25 billion, of which 15 billion is funded by the petrol tax), and environmental protection (2.6 billion). The targeted and earmarked subsidies with other special subsidies (e.g., for support of district heating) together make up about 10 percent of local budgets. Since total investment is likely to be less than 20 percent of the budget, central subsidies are clearly influential in local development decisions.

Addressed subsidies make up 5.3 percent of local budgets; these are for large-scale projects which the local authority cannot finance and which serve a larger community purpose. These can cover 100 percent of the cost. Unfortunately there is no money available for these subsidies this year, so although projects may be "accepted" they will not be funded until next year at the earliest.

Targeted subsidies are matching grants distributed on a competitive basis according to development objectives which are established by the central government for three years at a time. These subsidies cover 30 percent of the cost; an additional 10 percent is given if more than one local government applies for the same project. New regulations require that projects under approved priorities *must* be given subsidies, so that applications are accepted even after all available funds are allocated, under the understanding that funds will be provided the following year. Under this guarantee, local governments can proceed with the project.

Total addressed and targeted subsidies in 1991 came to 16 billion HUF, with addressed grants totaling 7.6 billion HUF. (This does not include the grant to county governments of 400 HUF per capita, totaling 4.2 billion HUF, which after 1992 became a normative grant.) The 2,800 requests for targeted subsidies in 1991 amounted to 15.8 billion HUF, while planned investment reached about 30 billion HUF. The funds budgeted for that year were 6.2 billion, but the total approved was 8.5 billion HUF of which 4.9 was given to new projects, and 3.6 to ongoing projects. The sectoral make-up of grants was as follows:

Table 4. Targeted grants in 1991 (million HUF)

	Requested	Approved	Approval rate (percent)
Water management	7,470	3,220	43
Health and social sector	2,330	1,840	79
Education	5,080	3,260	64
Waste management	260	150	58
Other	620	–	0
Total	15,760	8,470	54

While almost 40 percent of targeted grants were for water management, requests in that sector had less than a 50 percent chance of being approved, by far the lowest among the sectors.

For 1992 targeted and addressed grants combined increased by 66 percent to 26.5 billion in grants approved. Parliament's allocation was made through two acts:

Table 5. Allocation of targeted and addressed grants in 1992

Act	Requested		Approved	
	number	bn HUF	number	bn HUF
1992. XXVL	3,404	40.6	2,491	25.2
1992. XXXIV	264	2.0	168	1.3
Total	3,668	42.6	2,659	26.5

The budgeted addressed and targeted grants for 1993 came to 28.7 billion HUF. While the total amount of grants rose over the last three years (although not in real terms in 1993), the proportion of grants for new capital projects dropped

sharply, from 58 percent in 1991 to 29 percent in 1992 and 28 percent in 1993. The requested funding for new projects is several times higher than the available resources. The budget proposal for 1994 was 33 billion HUF for the two types of grants, and only 4 billion HUF (or 12 percent) is planned for new projects.⁵ That means that projects which met the criteria set by the law in 1993 (amounting to 14-15 billion) have to be postponed until 1995.

Because local governments have applied for three times as much money as may be provided from the budget this year (1993), the Government suggested specific objectives be set and that priority projects that cannot be subsidized in 1993 should be supported in 1994. The provision of healthy drinking water and the construction of sewage networks are among priorities recommended by the government. Nevertheless, budget limitations clearly imply that local governments have not been able to rely upon central funding for infrastructure projects in the last two years, nor should they in the near future.

Local taxes represent quite a small part of the local budget partly because the new local governments are wary of overburdening the population, and partly due to the constraint of central regulations. The central government had been over-optimistic about the taxing power of local governments: the 1991 budget budgeted for HUF 21 billion in local tax revenues while actual revenues amounted to HUF 9.5 billion. For 1992, the respective numbers were 25 and 15 billion. Despite those expectations, central regulation contributed to low receipts through the many exemptions still included in national law, such as the generous exemption for residential property of 25 forint per person. Further predictions seemed to rely too heavily on taxation of entrepreneurs, which proved a variable and disappointing source. An amendment to the Act on Local Taxes was debated in December of 1992, but a number of modifications which would have strengthened local independence were defeated. Local government is also cautious about increasing the burden on its constituents through user fees.

Revenue from municipal property— mostly newly acquired through the Transfer of Property Act— is at present an important revenue for local budgets (often between 10 and 15 percent), and is a preferred way of revenue-raising as it does not hurt the population. However, this strategy is not necessarily wise as the real estate market is down and as the local government has very little experience with the efficient use of the property they own. This is manifested particularly clearly in the low-price sales of local government properties which results in a quick shrinking of assets. Other problems include incomplete and inaccurate inventories and uncertainty about asset values, related partly to unclear regulation

For purposes of comparison, total local government capital expenditure was 70 billion HUF in 1991, 99 billion in 1992, and a budgeted 105 billion in 1993.

of tariff setting. Moreover, asset sales are clearly not a stable source of revenue for the future.

The loan is a new source of funds, and quite popular with local governments. Until now municipalities have mostly taken loans from the National Savings Bank (OTP), but new types of debt are also being considered, such as bonds, although to date they have had limited use. A new municipal lending window is planned for OTP under the support of the European Bank for Reconstruction and Development (EBRD), but it is not clear when it will begin to operate.

OTP currently is by far the major lender to municipal governments. Requests for loans to finance water and sewage projects came to approximately 720 billion HUF last year. Loans to local governments for infrastructure fall primarily in two categories: subsidized loans to water and sewage associations (described below in greater detail) and unsubsidized targeted loans for utilities, markets or schools. In the first six months of 1993, about 300 million was disbursed for associations and 1300 million for targeted loans. Loans are usually for three to five years, with a variable interest rate, currently at 25 percent. Conditions for a loan are fairly straightforward: the local government must have an account with OTP (and 96 percent of them do); the local assembly must approve the investment and must give OTP the right to garnish directly from the city's account. It may have to provide cash flow projections and an inventory of assets if the loan is large, but since the collateral is the budget (and especially the large central transfers), little emphasis is placed on the project being funded. It is not clear why other lenders are not competing for the business of local governments, which as a relatively stable sector of the economy, should be fairly desirable borrowers.

Cost Recovery from the Population

Pricing. The principle behind the new allocation of the right to set tariffs is that whoever has the responsibility to provide the services should set prices, but in most of the cases these legal issues are in transition. For example, in the water sector there is a plan to hand over price-setting to the local government, but the transfer has not actually taken place, mostly because of concern over extreme differences that might evolve around the country. Electricity and gas prices are set at the central level; district heating and hot water charges are now set by the local governments.

According to the 1990 Act on Prices, either the local government or one of the ministries has the right to limit prices for each public utility. The law only says that the price must include the expenses of efficient operation and the profit required for efficient operation— without defining efficiency or how it will be

monitored. Prices are intended only to finance operations and maintenance and not to recover capital costs. It can be inferred that at the moment the establishment of the highest price is the subject of heavy bargaining between the public utility company and the given authority. Water tariffs, for example, are now set by the Ministry of Transportation, Communication and Water Management (MTCWM), after receiving proposals from individual water companies. Water companies base their proposed tariffs on a formula based on operating costs and no capital costs, although this January for the first time Budapest proposed a new price which included a small development charge and the Ministry accepted the proposal.⁶ The local government role in the process is to approve the company's proposal. This process results in very different prices around the country, from a low of HUF 21/m³ in Budapest to HUF 107/m³ in the Balaton area.

Connection fees are determined by the local government according to a cost-based formula (also set by the Ministry) that is only allowed to cover side pipes, which can be a problem where existing mains or treatment plants are already at capacity and funds are not available for capital development. Connection fees for water and sewage usually range from HUF 50,000 to 65,000 per unit. (This might be a quarter or less of the cost of the entire network development.)

Once price-setting authority is transferred, local governments will have to balance the need to have the public utility service company operated properly at prices which fully cover expenditures with the protection of local citizens from drastic price increases.

In the transitional period there has already been a serious attempt to cut the subsidies which had been a long standing systematic element in centrally planned economies. Cutting the subsidies has meant a severe tariff increase starting from the sources controlled by the central government and state-owned companies and spilling over to the end user. In the water sector, state subsidies began to be lifted several years ago, and consumers went from paying only 10 percent to now paying almost the full operating cost. Current price subsidies from the central government are now available only to local governments where the water and sewage charge together exceeds 80 HUF, so that Budapest, for example, where the combined charge is now 50 HUF, is not eligible.

Many officials currently express doubt over the ability of consumers to pay higher tariffs, but there are a number of indications to the contrary, especially where increased charges could result in better services. Where people have to pay

The development contribution of 4 and 1.2 HUF/m³ for sewage and water respectively adds up to 967 million HUF (after the 40 percent tax) and covers 57 percent of capital expenditures for 1993. It should be noted, nevertheless, that water prices in Budapest are the lowest in the nation.

HUF 2000 a month to have trucks collect from septic tanks (the estimated cost from District XVII), they would probably be willing to pay something more than HUF 400 per month (the usual sewage fee) to gain access to the sewerage system. Although there are high utility arrears around the country, this is attributable to poor collection practices⁷ and lack of metering as well as to economic difficulties. With increasing income differentiation, many households are able to pay higher charges, and especially in conjunction with some sort of safety net for the poor, such as the housing and utility allowance in place in Szolnok, it should be possible to increase cost recovery.

In the past, operating fees and connection fees have been significantly higher for industry than households, but this gap is now narrowing. Prices were a complex system of cross-subsidy. Industries paid a special drinking water charge in order to create an incentive not to use the central drinking water base, but rather their own wells, which are more expensive to operate than the centrally subsidized water. There is still no discount for volume.

Development Charges. In the past a considerable portion of the cost of public utility development was passed on to the population by the councils through water and gas neighborhood associations established in certain areas, through which local governments collected the majority of the required funds; as that was often the only way for a given region to get access at least in part to utility services, citizens had to join such associations and invest the required amounts. The formation of an association entitles the members to subsidies from both the central and the local government to finance network development. Central subsidies to water and sewage associations cover 70 percent of the interest of the household and local government portion of the association loan. The term for these loans is seven years by law, and the subsidy is based on a government-set interest rate which is currently 28 percent. To slightly mitigate the expense, for a few years following the introduction of the personal income tax, it was possible to deduct from the tax base the amounts paid into such associations and used for the development of public utilities, but that opportunity has ceased by now.

Subsidized loans are available directly to households for utility connections — in 1992 OTP issued almost 110,000 such loans to households for with an average loan size of HUF 44,000. The subsidies have the same terms as the general repayment subsidy for housing, that is, repayment is reduced by 30 percent for five years, and 15 percent for the next ten years. There is a limit of HUF 50,000 per type of utility, and a total limit of 200,000 per home. When

⁷ In Budapest, for example, it seems likely that the large water and sewage arrears are substantially due to the inefficient and collection practices of the separate public billing firm.

neighborhood associations are formed to pool efforts to finance utility extensions, a 70 percent interest rate subsidy is made available by the central government.

A settlement development contribution provided further funds for the local councils. It was set out in a Directive issued in 1984, which allowed local councils to set a certain type of local tax in order to facilitate the fulfillment of their tasks and in order to complete their development projects and achieve their aims.

The local councils had a special right on the basis of a Directive issued in 1983 which made compulsory the payment of a road and public utility development contribution from all those who were not located on state-owned land and who benefitted from some road or public utility development. Naturally, the local population had no say whatsoever in what development they wished to see in a given settlement. It was decided by the local council only, but part of it was paid for by the population.

As public works companies are now being converted into shareholding companies or being privatized, no effort is being made to reimburse households which contributed to the development of infrastructure, for example with shares in the new company. Such an arrangement could serve as an incentive to municipality and private development contributions in the future.

Legal regulations concerning management and accounting issues for public companies in some cases may further impede efficient cost recovery. For example, as mentioned above, in the past prices were based exclusively on operating costs, but now companies may be able to add a development component as well. However, while the Accounting Law apparently has liberalized requirements, companies complain that insufficient portions of investments can be charged off each year, so that too large a portion of increases in user charges intended for development may be subject to the profit tax. Moreover, it seems that new development— as opposed to maintenance and replacement of old networks— may have still less favorable rates of depreciation. It may be that legal changes will be necessary; in addition, investment tax credits might help encourage utilities to undertake needed capital development.

Managing the Development of Public Infrastructure

With declining inflation-adjusted transfers from the central government, local authorities are caught in a bind. They are supposed to provide services, but are getting less financial assistance from the state. They have little experience in dealing with self-financing and cost recovery of infrastructure. But they will have to adjust quickly and learn to combine the available central support with other financial sources such as user fees, tax revenues, and debt. Some innovative localities are already experimenting with combinations of these sources— one

example, Veresegyháza, is described later in this section— but most of them have an enormous need to learn to use these tools and incorporate them into a more strategic approach to investment, while also establishing clear and efficient institutional forms for the utilities and effective regulation. Technical assistance to the local governments must include and integrate all these elements.

Problems of Local Budgeting

The budgeting process and management of the local public economy is one of the weakest areas for local governments. The budgeting process lacks any overall consideration of the city economy. Most cities have not systematically attempted to put together an economic development strategy or to develop any broader context for their investment decisions; in general planning only extends as far as the current year.

One problem is the unpredictability of resources. As has been made clear, local budgets rely heavily on central transfers, but the magnitude of these varies from year to year. The annual Act on the State Budget— which is issued early each calendar year— defines what funds may be available to local governments through normative grants, or targeted or addressed funds; what proportion of the personal income tax and central taxes will be allocated to local governments; and how the duties and levies collected by local governments are divided among the various settlements. This variance in central transfers makes long term planning extremely difficult.

Another problem is institutional; the municipal budget department has traditionally been far from the political arena or the decision-making process, so that when planning is underway, it does not integrate budgetary considerations. After the previous strict central control over local expenditures, the shift to a new system of independence in spending is incomplete. Overall planning— including capital budgeting— must increase, and has to consider revenue raising rather than just automatically spending by categories as before. Future tax base estimation is rarely undertaken, and OTP loans are the only source for debt financing that is considered. The resistance to cost recovery which nominally based on the hardships of the populace also has roots in municipal inexperience.

Currently, most project proposals do not include sound financial analysis. Where economists do participate in project preparation, their contributions are to assess the cost — although even in this area proposals are reportedly uneven inequality and detail— as opposed to contribute during the design phase, examine alternatives, and explore possibilities for cost recovery. If financial analysis were present from the inception of the project, those considerations would contribute to project design, as well as providing detailed and accurate cost information. In

addition, without consistent demand studies at an early stage of planning, possible financial sources may be precluded.

The local assembly must make all investment decisions based on proposals prepared by the city staff and presented through the relevant committees. Two decisions are required: once when the purpose of the project is announced; once when the concrete project proposal is presented. Because of this time-consuming process, the assembly relies heavily on accurate and informative proposals. There is generally absent a system for assigning priorities to projects except within the Assembly. Given the shortage of budgetary funds, a strong emphasis should be placed on setting clear priorities among projects and on writing project proposals which thoroughly examine the financial aspects of the planned investments.

Local governments frequently feel the requirements for preparing thorough applications for central subsidies to be onerous, although according to the Ministry of Interior, its regional office, TAKISZ, should be able to provide some assistance. Worse, without these analytical tools local governments are unable to properly assess the feasibility of the investments they are considering, and to choose between the urgent needs they face.

Municipalities need help with institutional and technical development. More responsibility should be given to professional staff in many areas including financial planning. They could also benefit from the development of specific skills such as better budgeting, cost recovery, project preparation, incorporating financing into project design, estimating the tax base, local economic development, and strategic planning.

Example of an Local Options for Development Financing

Veresegyháza, a town of 6,000 in the Budapest agglomeration, is a rare example of a township which has proceeded in strategic manner, and used a number of innovative schemes in order to initiate some important infrastructure developments, mixing debt financing and user charges with considerable success.

Thinking ahead, the town gave the population interest-free loans with which to fully repay their old housing loans in 1989 when they were being converted to market rate loans, figuring that by helping them avoid the higher rates they would be more able to pay local taxes.

As the town believed its water supply adequate with a newly constructed reservoir, and the sewerage system incomplete but too expensive a problem initially, it began by tackling the gas network, which was financed jointly by the population and the town. The town contributed a 10 percent subsidy; the population paid the other 90 percent through either a one-time fee of HUF 50,000

per household for a connection, or could if they preferred in installments over three years.

Their next investment was in communications, which town leadership perceived as a way to increase tourism and broaden their tax base. The city took out a loan to front construction costs for a complete telephone system, which is now at 100 percent, with an additional 1,300 potential lines. This system is now the property of the telephone company, MATAV, which is repaying the city. The population pays a downpayment of HUF 1,700 per household, and then monthly installments of a maximum of 3,000 over 25 years to three years. The total cost will be HUF 75,000 per line. Households could have applied for loans of 50,000 but few homeowners are currently creditworthy because of other outstanding loans. Therefore the town itself applied for a loan of HUF 270 million from OTP, which it is now repaying at 27 percent interest. The gap that leaves—about 35 million—is expected to be covered partially by the connection charge for entrepreneurs of 250,000 HUF, and the town expects demand to increase with the quick availability of lines (a three day wait, extraordinarily short in Hungary). The town also expects the improved infrastructure to increase land prices and expand the tax base.

The town is now planning to invest in a sewerage system. It will apply for half the cost from an addressed subsidy from the central government and another HUF 100 million from the Environment Protection Fund. It expects to have household contributions amounting to 350 million, including HUF 50,000 hook-up fees.

STRUCTURING TECHNICAL ASSISTANCE IN THE SECTOR

Because of the great changes that have taken place in the past few years, it will be important to start by reviewing all relevant laws and decrees implementing policies connected with the provision and financing of the sector. We need to know how the current system works and whether alternative methods and practices can be utilized without violating laws and policies. This investigation will have to cover institutional arrangements, financing, and cost recovery. The work has already started to some degree, by assembling relevant laws, and arranging for a Hungarian law firm to review them.

Hungary's transition has sparked the reorganization of infrastructure institutions. While a review of current legislation will provide some perspective on current practices, we need to work from the bottom up in several cities to fully understand the variety of methods used to organize and oversee infrastructure operations, tariff setting and capital construction. So we propose working with

several local governments so that the technical assistance focuses on concrete problems.

Given the range of infrastructure problems and institutional environments, it is highly unlikely that one generic approach would work in cities across Hungary. Therefore we propose two alternative forms of technical assistance: one highly focused, addressing a specific infrastructure component; and the other more general, focusing on how to improve the overall performance of the sector and to strategically use infrastructure investments to promote economic development. While the centerpiece of assistance will be infrastructure projects, skill-building will be broad— capital budgeting, project preparation, cost recovery, developing strategic capabilities, local tax base estimation, and linking investments to economic development strategies. Simultaneously, technical assistance related to the changing institutional structures will be provided, including streamlining the organizational structure, collections and delinquency management, the regulation of utilities, and efficient property management. Moreover, the municipal work will be complemented by background work at the national level on new financing mechanisms, looking at matching grants, off-budget funds (revolving funds, subsidized credit), and decentralization of price setting.

Because the goal is broad applicability across Hungarian cities and the prompt dissemination of results will be important, a two-tier structure is proposed for this part of the assistance (see chart on the following page). After each step is undertaken in the city receiving the strategic assistance, a similar step on a less intensive scale will be carried out in two or three other municipalities— for example, based on the first assessment of infrastructure needs and budgeting procedures in Szolnok, an outline will be developed, and then completed for the other cities. A much lower level of effort will be allocated to this exercise than to the more intensive focus on the principal city, and the work will be carried out primarily by local consultants, with direction and review by the experts focusing on the primary local governments. Results will be shared among all involved municipalities. Seminars for all the project local governments will be scheduled every four months.

Selecting Local Governments for Collaborative Technical Assistance

We propose working with a range of cities to help them solve their infrastructure service problems. Selection of local governments has been based on the expected fruitfulness of the technical assistance and the usefulness of the city as a model for other local governments.

Obviously Budapest has special characteristics which may limit its use as a model to other local governments. Nevertheless, because it houses a fifth of the Hungarian population and because its City-District form poses special problems, it

would benefit from assistance. We propose to focus there on working on the district level on specific technical assistance pertaining to the financing of a wastewater treatment facility. The one-project focus will enable the assistance to address the City-District relationship very concretely, and will maximize the usefulness to other local governments through the preparation of that project. Both the city government and the two districts have expressed great interest in USAID assistance.

Szolnok, a city of 80,000 to the east of Budapest, has been proposed for work of a more general nature, designing an infrastructure development program to help the City attract industry and commerce. Szolnok is a "city with county rights" and also one of the nineteen county seats. In the usual classification of Hungarian cities, it is in the third layer, after Budapest— with a population of 2 million in a class of its own— and the eight cities with more than 100,000⁸.

The eight are Debrecen, Miskolc, Pécs, Szeged, Győr, Székesfehérvár, Szombathely, and Nyiregyháza.

Close to the center of Hungary, Szolnok has an important role as a transportation center, with a heavily traveled bridge over the Tisza River. It is also the location of the Middle Tisza Regional Water Company, an important water production facility which has been retained in state ownership. Two other important recommendations are the willingness of the city leadership to think strategically and to develop innovative programs as evinced by their recent partnership in a USAID assistance program on rental policy, and the fact that with a housing and utility allowance program already in place their population has an established safety net to protect vulnerable households from dramatic utility charge increases.

Cities proposed to receive second tier assistance include Nyiregyháza, Debrecen, and Szeged. These three fall into the large city category, and they expand the regional representation of the project.

Szeged, a city of 170,000 in the south of Hungary, is currently considering a proposal for a joint venture with French and Danish private partners to operate its water and sewer company. The city has already developed a long-term urban development strategy and they have requested USAID assistance in improving and broadening the strategy as well as in other areas. The city also feels building a new bridge is an urgent necessity, and hopes to investigate ways of recovering costs from benefiting areas through tax design or impact fees.

Debrecen, a city of 200,000 in eastern Hungary, lists as its primary investment objectives the repair or replacement of the city's trams and the redevelopment of downtown commercial buildings. In the next few years the city needs to begin work on the repair and extension of water and sewer lines, possibly financing the investment with municipal bonds backed by user fees.

Nyiregyháza is a city of 114,000 in the northeast of Hungary. In telecommunications it is in last place among the 20 "large cities" with only three telephones per 100 citizens; 53 percent of roads are paved (in 19th place among the twenty). A large part of the city has gas mains, but this being further developed. More than ten percent of units have district heating. The city is surrounded by small farming clusters of 50 to 400 inhabitants each; water supply is being developed for those areas. The sewage system is the most problematic. Since the summer of 1991 large-scale development has been underway, with HUF 1 billion invested so far. A basic environmental problem is that the water table rose by two meters, so that the local government must take some significant measures.

Budapest

In the course of 1991 state-owned utility companies providing water, sewerage, hot water, gas, and district heating were transferred to the city; by December of 1992 these enterprises had been reorganized as municipal firms (it took a full year to prepare asset inventories of these firms and designate those parts of the property which should be separated from the company— mainly secondary activities which were very useful in the previous period to avoid shortages of different services). A remaining aim is to convert the utility firms into joint stock companies by 1996— the local government was the sole owner of the shares at the time of transfer and this will not change until the transformation is finalized by 1996.

Currently 86 percent of Budapest's inhabitants are connected to the sewerage system and only 20 percent of the waste water is cleaned biologically. They have two sewage treatment plants: the one in the north is not fully utilized as not enough water is directed there. The other one is in southern Pest with half of the capacity of the northern one. There are no plans for building totally new plants in other parts of Budapest (e.g., in Eastern Pest, because it would be too far from the Danube); instead there are plans for enlarging both existing plants. Local (district) governments, however, can seriously slow down this process by delaying building permits for these unwanted developments. In fact, as a result of the special division of decision-making power between the municipal and district governments, it is possible for both of them to block each other's plans: the municipal government of Budapest can have an area zoned for utilities in the Master Plan, or can even buy the area by compulsory purchase from the local government but the local government can hold back the whole process of building sewage treatment plant by not issuing a building permit.

Both the water and sewage companies have arrears of approximately HUF 400 million. Of the total due, 260 million is from households and 140 million from industries— there are many liabilities because companies went bankrupt or because of lax collection practices by the collection firm. However, the payment capacity of the population may be under strain as well, illustrated by the fact that arrears of households grew five times within a one year period!

Another big concern of the City is that the solid waste disposal capacity of the city is enough only for one or two years, and the planned new incinerator will not be ready until 1997. One of the reasons for delay has been the rejection of the proposed site by District XX, even with offered compensation. Therefore the old incinerator is being enlarged and modernized at a cost of 30 billion HUF, some of which may come from a Japanese loan. In the meantime the city will need to examine the possibility of opening up new private disposal areas, decreasing the amount of waste material, and improving recycling.

Districts XVII and XVIII (population 75,000 and 115,000 respectively) are both located in the southeastern part of Budapest and share many of the same characteristics: they have large undeveloped tracts, a high water table, inadequate sewerage system, and relatively low income population (and therefore a low share of the personal income tax). The Budapest airport is nearby, creating both economic opportunities and environmental problems. Both districts started as villages composed primarily of houses with gardens; they were incorporated into Budapest only in 1950. District XVII, for example, was composed of four different villages, two of which were agricultural, the two others originally intended as garden-settlements for Budapest residents. These latter two villages were among the first settlements outside small Budapest having their own water and sewage systems around the turn of the century. After joining the capital these outer districts remained for a long time the most underdeveloped parts of the city. Substantial changes only occurred in the case of District XVII in the 1970s when high rise housing estates were built, and significant industries chosen to set up activities in this outer part of Budapest with good traffic connections and large undeveloped areas. The main sewage system was built at that time to permit further development; by now, however, this one link is at full capacity.

District XVII feels that it has a huge backlog in public services: electricity is the only one without critical problems. With respect to water supply, which was considered a pressing problem in the autumn of 1992, the district has signed a HUF 2 billion agreement with the City which should ease current problems (consumption is now taxing the system at capacity): a connection will be built from the direction of District XVIII. Sewage treatment thus remains the largest problem for District XVII. Only about 50 percent of district households are connected to the sewerage system.

Other infrastructure problems are roads— only 30 percent are paved, and new roads are needed. There are currently only two roads connecting the main developed area with the metro line into central Budapest. District planners have three alternatives in mind: an extension of the subway; development of a fast tram, or a special fast train. In addition they need a new bus terminal, and revision of bus lines.

District XVII would welcome collaboration with District XVIII as the two districts share many characteristics although XVIII is more urban, and is felt to have less problems with transportation and public services.

The management of District XVIII also believes sewerage presents the largest problem. In 1992 the district received central funds of HUF 6 million for projects, with another 1.5 b intended to cover operational expenses. It would take an additional 1.5 billion to complete the sewerage network if it were connected to southern Pest treatment plant. Their application to connect, however, has been

repeatedly rejected because the center is already at capacity. Another possibility would be to build a new treatment center— they are considering Swiss, Dutch, and Norwegian designs— modular form, which would take only about onetenth the land as Southern Pest center. This solution would cost over 2 billion, which the district cannot afford alone. Connection fees of HUF 6005,000 per unit could be charged, according to central regulations. The district has also applied for a targeted subsidy; it is still possible that they may receive one in 1994.

Because this is such a pressing problem, the district is considering financing the mains, although legally this is the city's responsibility and the city sewage company would become the owner of the new network. If they chose the option of a regional treatment center and operated it in conjunction with other districts and possibly towns in the Budapest agglomeration then they could maintain control of revenues.

Szolnok

Szolnok is facing a number of infrastructure problems of which the most urgent is sewage. In addition district heating is now undergoing a transformation, and the city needs to face institutional decisions of who should operate the heating plant in the future. A new motorway has just been completed, dramatically changing traffic patterns— as national traffic that used to flow directly through the city center has been redirected to the south to a new bridge across the Tisza River. A new transportation system must be designed including if possible some areas which can be made free of vehicles altogether. The Mayor underlines that housing, transport, and utilities must be examined and redesigned together in a thorough approach to town development linked with an economic development strategy.

Local governments have huge difficulties in financing new investments. At present, with tight budgets, they can at best spend only 8 - 15 percent of it on new development. In the case of Szolnok not even this is possible: the budget is in the magnitude of 3 billion HUF of which 2.2 billion is from central transfers. Instead of a planned increase of 400 million increase, the net position of the local budget decreased by 150 million HUF as a result of the decreased share of PIT transfer to the local governments from 50 to 30 percent. Because 90 percent of the 1992 budget expenditures was spent on running existing institutions and these tasks cannot be decreased in a short time, the city cannot now finance any development from its own resources.

The sewage treatment plant is the number one priority among necessary infrastructural investments. A solution to the wastewater problem has been planned for 20 years. Efforts until now resulted in the completion of the main and the side pipelines. Of the 28 thousand flats in the town, 75 percent have been

connected to the sewage system. Because there is now a sewage network but no sewage treatment plant, sewage is now dumped untreated into the Tisza River at one point instead of many. The completion of a new plant would obviously be in the interest of everyone downstream, that is, all the settlements near the Tisza between Szolnok and Szeged, but it is unclear how downstream beneficiaries might contribute to this improvement.

Until 1993 sewage treatment plants were on the list of those items for which it was possible to apply for central budget matching grants (the addressed subsidy). In 1993 Budapest and the county towns (bigger towns, including Szolnok, which have "county rights") were excluded from this possibility. Thus the main possibility for getting central budget support is to apply for targeted subsidy which can amount to any portion (up to 100 percent) of the cost of the investment.

Szolnok decided recently (March 1993) to apply for this grant. In theory this is a better form of central subsidy than the matching grant which requires 60 percent of the investment value to be covered by the local budget: this is difficult in the case of investments over 60 to 80 million HUF, and especially for the sewage treatment plant whose cost is at least 1.2 - 1.3 billion HUF. Targeted subsidies, however, are far much more difficult to obtain. In fact no one in the Szolnok city government knows how decisions are made at the central level about which requests should be fulfilled and what are the real chances for the Szolnok sewage plant to receive any subsidy.

To take a loan is risky, especially because commercial banks only offer short-term — 3 to 5 year — loans with high interest rates. A central contribution through the Environmental or the Water Fund is uncertain and limited in amount (Szolnok can count in best case on 400 - 500 million HUF from these sources but this is very uncertain).

If they don't get the grant, city officials have considered financing the treatment center through an increase in fees, and have calculated they would need to increase the sewage charge by 20 Ft/m³ to finance it over 15 years, an almost 40 percent increase in the water-sewage price (from 54 to 74 HUF). This increase seems to be impossible because of the limited paying capacity of households, especially taking into account the amount of existing arrears and the fact that rents have just been increased to a three times higher level. However, Szolnok does have the advantage of having in place a means-tested utility allowance, which would mean that the mechanism to protect the neediest households from charge increases is already in place. The most likely solution for the city will be a combination of user charges, loans, and grants. This problem, together with the other infrastructural backlogs, are common in Hungarian cities today.

We believe Szolnok would be a good candidate for a broad approach to infrastructure finance, and propose work with the city on developing an

infrastructure strategy that will include efforts to finance the city's most urgent needs such as the sewage treatment plant.

Approach for Providing Focused Technical Assistance

Overview

The following sequence of activities is proposed to provide Districts XVII and XVIII with support. The focused approach would be modified for application in other cities.

Steps for TA

1. Survey existing conditions in wastewater sector, review technical studies, needs assessments and financial structure and performance of service provision.
2. Estimate demand for (willingness to pay for) improved wastewater treatment, conducting a household and business survey in the Districts.
3. Identify appropriate methods for wastewater improvement project cost recovery and project financing and prepare pro forma estimates of the financial feasibility of each.
4. Review and assess institutional structure of wastewater treatment service provision and identify alternative models for service provision; for example, concessions, BOT, BOO, municipal utilities, private utilities regulated by public utility commission (bearing in mind the existing legal framework). It will be especially important to work with the Budapest municipal government at this stage.
5. Evaluate financial and institutional options for wastewater improvement project.
6. Based on the evaluation, make recommendations to Districts as to best approach(es).

Expected Results

This will amount to a thorough project preparation which should be a useful model for other local governments. It will help the districts to resolve the pressing sewage problem, and will be a model in city-district cooperation.

Approach for Providing Strategic Technical Assistance

Overview

The following sequence of activities is proposed to provide Szolnok with support. The general approach is aimed at developing an infrastructure strategy to promote economic growth. An important component will be the strengthening of municipal staff, and the consideration of institutional forms of public utilities. After its elaboration and testing in Szolnok, it would be modified for application in other cities.

Steps for TA

1. Survey existing conditions in city infrastructure (including especially the wastewater sector), review technical studies, needs assessments and financial structure and performance of service provision. Assess current capital budgeting and project preparation procedures, focusing on two or three of the top housing-related infrastructure needs.

2. Assess economic structure of City, review current problems, gauge potential for attracting industrial and commercial activities, and prepare an economic development strategy for the City.

3. Prepare a capital budget and infrastructure development strategy for constructing and upgrading the city's infrastructure system required to implement City's economic development plan. Budget should estimate costs and set priorities for sequencing investments.

4. Estimate demand for (willingness to pay for) improved infrastructure services, conducting household and business surveys.

5. Identify appropriate methods for financing infrastructure projects and prepare pro forma estimates of the financial feasibility of each method for each infrastructure component (water, district heat, wastewater, etc). Here methods will include the usually variety of user charges but may also include assessment districts for vacant and underutilized areas, redevelopment and tax increment models and so on. The general idea is to prepare an overall estimate of capital investments needed in the infrastructure area and then develop a series of mechanisms to finance them. The overall intent goes beyond just "catching up" and eliminating infrastructure deficits— it focuses on a strategy aimed at promoting urban economic development.

6. Review and assess institutional structure of Szolnok's infrastructure services and identify alternative models for service provision: for example,

concessions, BOT, BOO, municipal utilities, private utilities regulated by public utility commission, redevelopment districts (bearing in mind the existing legal framework). Address issues of regulation by city in the short term.

7. Evaluate financial and institutional options for gearing infrastructure provision with economic development plan.

8. Based on the evaluation, make recommendations to City as to best approach(es).

Expected Results

In addition to resulting in a series of concrete steps towards improving utility institutional forms and financing tools, and the design of an infrastructure development strategy for Szolnok, this assistance will strengthen the skills of municipal staff in areas such as capital budgeting, economic analysis, and the use of a broad array of financing techniques. These lessons will be disseminated to other municipalities through frequent seminars with the four or five second-tier cities.

BIBLIOGRAPHY

Infrastructure, Central Statistical Office, Budapest, Hungary, 1991.

ANNEX A:

RELATED PROGRAMS BY OTHER DONORS

The World Bank

Water and Sewage

The World Bank is in the process of designing a project in the water and sewage sector. In preparation for loans to be available to a number of cities for sewage treatment, a program of technical assistance will be implemented starting in the near future. Three sorts of technical assistance are presently being contemplated.

The first component consists of two studies to be undertaken with Japanese funds — one an organization study on the water authorities in north Hungary, centered in Miskolc, aimed at institutional strengthening, and the other possibly a study in the city of Eger. The second component consists of technical assistance to two cities in institutional forms; it is planned that one be a concession arrangement and the other a joint venture. The third component is to prepare a broader technical assistance and training program to be provided to cities applying for the World Bank loans next year or the following year. Under the second component USAID is currently providing funding for technical assistance to the city of Szeged in reviewing a proposed water and sewerage joint venture with a French-Dutch enterprise (Compagnie Generale des Eaux and Kruger). A first visit by consultants Jim Kelly and Ben Darche took place in early June. They feel that the city will need to undertake further analysis in order to make an informed decision about the CGE/Kruger proposal, and will outline the key issues in their report; they submitted a draft of their report to USAID in July. It is possible that USAID Office of Housing and Urban Programs may collaborate further in this or others of the Bank efforts.

Municipal Finance

In a separate effort, the World Bank is planning a research and policy conference on fiscal decentralization and resource mobilization in Hungary, with the aim of developing a research agenda. The conference, likely to take place in early 1994, will examine the Hungarian situation in the light of other country experience with respect to topics such as functions appropriate for different levels of government, intergovernmental transfers, local revenue policy, local government budgeting, and infrastructure finance.

European Bank for Reconstruction and Development

The European Bank for Reconstruction and Development has been planning to establish an OTP municipal lending subsidiary, but plans are now on hold due

to disagreement on a number of basic structural issues. There may be some progress in the autumn of 1993. In view of the delay, the only significant source for local government loans at present is the OTP.

USIS

Under the sponsorship of USIS, the Council of Governors' Policy Advisors has organized a series of local government workshops that took place in mid-May in Pécs, Szeged, and Debrecen. These addressed issues related to tax and budget policy, economic development marketing, communication and consensus building, and technology transfer policy. While these workshops are helpful in focusing attention on some important topics and helping local government officials think broadly and strategically about issues that they can usually only address as an immediate crisis, it is also clear that in one or two days this process can only be begun. It is hoped that participants from these seminars and future seminars will be made aware of this longer term technical assistance being planned in infrastructure finance, and that future efforts will be further coordinated.

CGPA plans to hold a major national seminar on local revenue and tax policy in the City of Veszprem in September of 1993. The team for the seminar is headed by Terry Buss and will include Robert Ebel, Local and Intergovernmental Finance Specialist from the World Bank.

Local Environment Management Project (LEM)

This AID supported project is being carried out by Research Triangle Institute to work with local governments in Poland and Hungary to strengthen their ability to manage local environmental problems. In Hungary they are focusing on solid and hazardous waste management issues in Győr, and in Ózd, Edleny, and Sajószentpéter in Borsod County.

Because part of the assistance will address the financing of a remediation plan for hazardous waste site effects in Sajószentpéter, and the development of a business plan for financing new landfill sites and a new solid waste management system in Ózd and Edleny, the LEM project and the technical assistance proposed under this infrastructure finance project should be mutually beneficial.

USAID Public Administration

USAID is currently in the design phase of a program offering technical assistance in public administration.

ANNEX B:
LIST OF CONTACTS

National Government

Lászlo Moré
Deputy Head for Local Finance
Ministry of the Interior

Sándor Varga
Head, Section for Local Governments
Ministry of Finance

Ibolya Gazdag, Senior Associate
Gyula Holló, Deputy Head
Department of Water Management
Ministry of Transportation,
Telecommunication, and Water Management

Local Governments

Budapest

The Capital

Károly Oszkó, Head
Péter Zách
Public Utility Works Office

District XVII

József Dóci
Mayor

District XVIII

Zoltan Cslovcski
Council Member

József Veszteg
Head, Economic/Entrepreneur Office

Debrecen

Ferenc Lakatos, Architect
László Takács, Economist/Engineer
Department of Public Works

Nyíregyháza

Zoltán Mádi, Mayor
István Veres, Chief Architect
Lajos Nagy
László Bartha, Assembly Member
Nyíregyháza City Hall

István Móricz
Niko Daniel, Chief Engineer
Sz - Sz County Water and Csatornamu Company
Nyíregyháza

Szeged

Attila Jankó
Council Member

Szolnok

Attila Várhegyi
Mayor

József Kéri
Deputy Mayor

Veresegyháza

Béla Pasztor
Mayor

National Savings Bank (OTP)

Marton Nagy
Olga Rátvay
Local Government Office

The World Bank

Ann Elwan
Senior Economist
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Krisztina D. Kiss
Operations Officer
Budapest World Bank Office

European Bank for Reconstruction and Development

Emmanuel Forestier
London

ANNEX C: Relevant Laws

Act 27/1975. Regulates drinking water/sewage/public services: specifically, tariff setting and regulating. The Ministry is working on revising this. (Until 1975 the local governments regulated services; this law gave the power to the Ministry.)

A new Water Issues Law. Has been submitted to Parliament for discussion.

Act LXV/1990 on Local Governments

Act XXXIII/1991 on Transfer of Property

Act XXXVIII/1992 on the state budget

Act C/1990 Local Government Taxation

Act XVI/1991 on Concessions

Act LXXXVII/1990 on Prices

Directive in 1983 concerning road and public utility development contribution.

Directive in 1984 allowing local councils to set local tax to complete development projects.

Table 6. Expenditure of the Local Governments

	1991	1992	1993 budgeted
Operating expenses	76.5	71.7	71.2
Interest	.6	.4	.5
Capital expenditure	16.8	19.2	18.6
Grants	4.8	7.3	6.5
Loan repayment	1.3	1.5	1.4
Reserve	–	–	1.8
Total	100	100	100
(Amount of total expenditure, million HUF)	416.902	515.889	564.517